## **CLAIMS**

- 1. A process for saccharifying starch, said process comprising contacting starch or partially hydrolyzed starch with a glucoamylase which has an amino acid sequence that has at least 80% identity with the glucoamylase of SEQ ID NO:7, under conditions that result in saccharification.
- 2. The process of claim 1, wherein said glucoamylase is present in the range from 0.05 to 0.5 AGU per gram of dry solids.
- 3. The process of claim 1, wherein said starch or partially hydrolyzed starch comprises at least 30 percent by weight of dry solids.
- 4. The process of claim 1, further comprising contacting said starch or partially hydrolyzed starch with a debranching enzyme selected from the group of pullulanase and isoamylase.
- 5. The process of claim 1, wherein the contacting is conducted at a pH of about 3 to 5.5 and at a temperature of 60-80°C.
- 6. The process of claim 1, wherein said glucoamylase is derived from Talaromyces emersonii.
- 7. The process of claim 1, further comprising contacting said starch solution with an acidic alpha-amylase.
- 8. The process of claim 7, wherein said acidic alpha-amylase is derived from Aspergillus niger.
- 9. The process of claim 1, wherein the glucoamylase has an amino acid sequence that is at least 90% identical with the glucoamylase of SEQ ID NO:7.
- The process of claim 1, wherein the glucoamylase has an amino acid sequence that is at least 95% identical with the glucoamylase of SEQ ID NO:7.
- 11. The process of claim 1, wherein the glucoamylase has an amino acid sequence that is at least 97% identical with the glucoamylase of SEQ ID NO:7.

- 12. The process of claim 1, wherein the glucoamylase has an amino acid sequence that is at least 99% identical with the glucoamylase of SEQ ID NO:7.
- 13. A process for saccharifying a liquefied starch solution, which method comprises contacting said starch solution with a glucoamylase that has an amino acid sequence that has at least 80% identity with the glucoamylase of SEQ ID NO:7.
- 14. The process of claim 13, wherein the glucoamylase has an amino acid sequence that is at least 90% identical with the glucoamylase of SEQ ID NO:7.
- The process of claim 13, wherein the glucoamylase has an amino acid sequence that is at least 95% identical with the glucoamylase of SEQ ID NO:7.
- 16. The process of claim 13, wherein the glucoamylase has an amino acid sequence that is at least 97% identical with the glucoamylase of SEQ ID NO:7.
- 17. The process of claim 13, wherein the glucoamylase has an amino acid sequence that is at least 99% identical with the glucoamylase of SEQ ID NO:7.